

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 104)

FOIL the expressions shown below:

1. $(-7x + 6)(-2x - 8)$

$$\begin{aligned} &(-7)(-2)x^2 + (-7)(-8)x + (6)(-2)x + (6)(-8) \\ &(14)x^2 + (56)x + (-12)x + (-48) \\ &14x^2 + 44x - 48 \end{aligned}$$

2. $(3x - 3)(9x + 7)$

$$\begin{aligned} &(3)(9)x^2 + (3)(7)x + (-3)(9)x + (-3)(7) \\ &(27)x^2 + (21)x + (-27)x + (-21) \\ &27x^2 - 6x - 21 \end{aligned}$$

3. $(5x + 6)(8x + 4)$

$$\begin{aligned} &(5)(8)x^2 + (5)(4)x + (6)(8)x + (6)(4) \\ &(40)x^2 + (20)x + (48)x + (24) \\ &40x^2 + 68x + 24 \end{aligned}$$

4. $(-9x - 2)(-3x + 5)$

$$\begin{aligned} &(-9)(-3)x^2 + (-9)(5)x + (-2)(-3)x + (-2)(5) \\ &(27)x^2 + (-45)x + (6)x + (-10) \\ &27x^2 - 39x - 10 \end{aligned}$$

5. $(6x - 2)(9x + 3)$

$$\begin{aligned} &(6)(9)x^2 + (6)(3)x + (-2)(9)x + (-2)(3) \\ &(54)x^2 + (18)x + (-18)x + (-6) \\ &54x^2 - 6 \end{aligned}$$

FOIL the expressions shown below:

6. $(-7x - 2)(9x + 7)$

$$\begin{aligned} &(-7)(9)x^2 + (-7)(7)x + (-2)(9)x + (-2)(7) \\ &(-63)x^2 + (-49)x + (-18)x + (-14) \\ &-63x^2 - 67x - 14 \end{aligned}$$

7. $(-3x + 5)(-8x + 7)$

$$\begin{aligned} &(-3)(-8)x^2 + (-3)(7)x + (5)(-8)x + (5)(7) \\ &(24)x^2 + (-21)x + (-40)x + (35) \\ &24x^2 - 61x + 35 \end{aligned}$$

8. $(-5x - 8)(-5x + 4)$

$$\begin{aligned} &(-5)(-5)x^2 + (-5)(4)x + (-8)(-5)x + (-8)(4) \\ &(25)x^2 + (-20)x + (40)x + (-32) \\ &25x^2 + 20x - 32 \end{aligned}$$

9. $(-7x + 4)(2x - 5)$

$$\begin{aligned} &(-7)(2)x^2 + (-7)(-5)x + (4)(2)x + (4)(-5) \\ &(-14)x^2 + (35)x + (8)x + (-20) \\ &-14x^2 + 43x - 20 \end{aligned}$$

10. $(3x + 6)(-8x - 2)$

$$\begin{aligned} &(3)(-8)x^2 + (3)(-2)x + (6)(-8)x + (6)(-2) \\ &(-24)x^2 + (-6)x + (-48)x + (-12) \\ &-24x^2 - 54x - 12 \end{aligned}$$